IN THE CLAIMS:

All claims currently pending and under construction in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Claims 7, 11, 10, 19, 20-22, 24, 28-32 and 34 are amended, claims 23, 27, 33 and 35 are cancelled herein, and claim 36 is added herein. All cancellations and amendments are made without prejudice or disclaimer. Claims 1-6, 8, 9, 12-18 and 25 and 26 were previously cancelled. Applicants respectfully submit that no new matter has been added.

Listing of Claims:

1-6. (Cancelled).

7. (Currently amended) An immunogenic composition for marking an exposure of a subject to wild-type *Salmonella*, said immunogenic composition comprising:

an immunologically effective amount of a live mutated bacterium[[;]] and a pharmaceutically acceptable carrier; ~~and an adjuvant,~~;

wherein, said live mutated bacterium ~~being~~ is ~~selected from the group consisting of the~~ *Salmonella enterica* ~~species *typhimurium, enteritidis, choleraesuis, dublin, abortus ovi, abortus equi, derby, hadar, heidelberg, agona,* and *arizonae,*~~ that in its wild-type form carries flagella[[,]];and

wherein said live mutated bacterium is not capable of inducing an immune response to at least one antigenic determinant of flagellin in the subject to which it is administered. ~~due to a mutation in a gene of the flagellar biogenesis pathway, said bacterium being in live attenuated form.~~

8-9. (Cancelled).

10. (Currently amended) The immunogenic composition according to claim 7, further comprising:

~~wherein the~~ an adjuvant ~~is~~ selected from the group consisting of Freunds Complete adjuvant, Freunds Incomplete adjuvant, vitamin E, non-ionic block polymers, muramyldipeptides, immune stimulating complexes, saponins, mineral oil, vegetable oil, Carbopol, *E. coli* heat-labile toxin, *Cholera* toxin, aluminum hydroxide, aluminum phosphate, aluminum oxide, oil-emulsions, and vitamin-E solubilisate.

11. (Currently amended) The immunogenic composition according to claim 7, wherein the immunogenic composition is in a freeze-dried or spray-dried form.

12-18. (Cancelled).

19. (Currently amended) An immunogenic composition for marking an exposure of a subject to wild-type *Salmonella*, said immunogenic composition comprising:

an immunologically effective amount of ~~a~~ an inactivated mutated bacterium, a pharmaceutically acceptable carrier, ~~and an adjuvant,~~;

wherein said inactivated mutated bacterium ~~being~~ is ~~selected from the group consisting of the~~ *Salmonella enterica* ~~species *typhimurium, enteritidis, choleraesuis, dublin, abortus ovi, abortus equi, derby, hadar, heidelberg, agona,* and *arizonae*~~, that in its wild-type form carries flagella[[,]] ; and

wherein said inactivated mutated bacterium ~~lacking at least one antigenic determinant of flagellin and not being capable of inducing an immune response to flagellin due to a mutation in a gene of the flagellar biogenesis pathway,~~ is not capable of inducing an immune response to at least one antigenic determinant of flagellin in the subject to which it is administered ~~and said mutated bacterium being inactivated~~.

20. (Currently amended) A ~~vaccine for the protection of animals against Salmonellosis strains,~~ composition comprising:

an immunologically effective amount of a live mutated *Salmonella typhimurium* ~~bacterium~~, wherein the wild-type form of the live mutated *S. typhimurium* ~~that in its wild type form~~ carries flagella[[,]];

wherein said live mutated ~~*Salmonella*~~ *S. typhimurium* ~~bacterium~~ is not capable of inducing an immune response to at least one antigenic determinant of flagellin in a subject to which it is administered ~~due to a mutation in a gene of the flagellar biogenesis pathway and being in live attenuated form, and~~ ; and

a pharmaceutically acceptable carrier comprising water, a solution of physiological salt concentration, SPGA, sorbitol, mannitol, starch, sucrose, glucose, dextran, albumin, casein, bovine serum, skim milk, or phosphate buffer.

21. (Currently amended) A ~~vaccine for the protection of animals against Salmonellosis strains,~~ composition comprising:

an immunologically effective amount of a mutated *Salmonella typhimurium* ~~bacterium~~, wherein the wild type form of the mutated *S. typhimurium* ~~that in its wild type form~~ carries flagella[[,]];

wherein said mutated ~~*Salmonella*~~ *S. typhimurium* ~~bacterium~~ is lacking flagellin and ~~comprising~~ comprises an immunologically effective amount of a ~~*Salmonella*~~ *S. typhimurium* strain STMP mutated bacterium[[,]] ; and

a pharmaceutically acceptable carrier.

22. (Currently amended) An improved *Salmonella* vaccine, having an immunologically effective amount of a *Salmonella enterica* bacterium ~~and~~ in a pharmaceutically acceptable carrier, the improvement comprising:

the *Salmonella enterica* bacterium comprising an inactivated mutated bacterium that in its wild type form carries flagella, but in its mutated form is no longer capable ~~to induce~~ of inducing an immune response to at least one antigenic determinant of flagellin in a subject to which it is administered ~~an animal, said mutated bacterium including a mutation in a gene of the bacterium's flagellar biogenesis pathway; and an adjuvant~~.

23. (Cancelled).

24. (Currently amended) The improved *Salmonella* vaccine of claim 22, wherein the inactivated mutated bacterium lacks flagellin.

25-27. (Cancelled).

28. (Currently amended) The improved *Salmonella* vaccine of claim 22, wherein the improved *Salmonella* vaccine is in a freeze-dried or spray-dried form.

29. (Currently amended) An improvement in a marker vaccine, comprising a *Salmonella enterica* bacterium, the improvement comprising:

an immunologically effective amount of a mutated *Salmonella enterica*, wherein the wild type form of the mutated *Salmonella enterica* ~~bacterium that in its wild type form~~ carries flagella[[,]];

wherein said mutated *Salmonella enterica* bacterium is not capable of inducing an immune response to at least one antigenic determinant of flagellin in a subject to which it is administered ~~due to a mutation in a gene of the flagellar biogenesis pathway and being selected from the group consisting of the *Salmonella* species *typhimurium, enteritidis, choleraesuis, dublin, abortus ovi, abortus equi, derby, hadar, heidelberg, agona,* and *arizonae*, and~~;

a pharmaceutically acceptable carrier[[,]] ; and

wherein the marker vaccine is in a freeze-dried or spray-dried form.

30. (Currently amended) The immunogenic composition according to claim 19, wherein the immunogenic composition is in a freeze-dried or spray-dried form.

31. (Currently amended) The improved marker vaccine of claim 29, wherein the mutated *Salmonella enterica* ~~bacterium~~ is in live attenuated form.

32. (Currently amended) The improved marker vaccine of claim 29, wherein the mutated *Salmonella enterica* ~~bacterium~~ lacks flagellin.

33. (Cancelled).

34. (Currently amended) In an immunogenic composition including a *Salmonella* bacterium, the improvement comprising:

a lyophilized immunogenic composition comprising a mutated *Salmonella* <u>*enterica;*</u> ~~bacterium, said *Salmonella* bacterium selected from the group consisting of the *Salmonella* species *typhimurium, enteritidis, choleraesuis, dublin, abortus ovi, abortus equi, derby, hadar, heidelberg, agona,* and *arizonae,*~~

said *Salmonella* <u>*enterica*</u> ~~bacterium~~ in its wild type form carrying flagella[[,]]<u>; and</u>

said mutated *Salmonella* <u>*enterica*</u> ~~bacterium~~ lacking at least one antigenic determinant of flagellin and not being capable of inducing an immune response to <u>the at least one antigenic determinant of</u> flagellin <u>in a subject to which it is administered</u> ~~due to a mutation in a gene of the flagellar biogenesis pathway~~.

35. (Cancelled).

36. (New) A composition comprising:

an immunologically effective amount of a mutated *S. typhimurium*, wherein the wild type form of the mutated *S. typhimurium* carries flagella;

wherein said mutated *S. typhimurium* comprises an immunologically effective amount of a *S. typhimurium* strain STMP mutated bacterium; and

a pharmaceutically acceptable carrier.